

CERIUM-ZIRCONIUM COMPOSITE METAL OXIDE

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ABSTRACT OF THE DISCLOSURE

10 A cerium-zirconium composite metal oxide having improved durability at high temperature and a stable oxygen storage capacity is provided. The cerium-zirconium composite metal oxide is characterized in that the total mole number of Ce and Zr is at least 85% based on the total mole number of metal in the composite metal oxide, a molar ratio Ce/Zr is within a range from 1/9 to 15 9/1, and an isoelectric point of the composite metal oxide is more than 3.5. Preferably, the molar ratio Ce/Zr is within a range from 3/7 to 7/3 and the isoelectric point is within a range from 3.8 to 5.0, and the cerium-zirconium composite metal oxide contains a 20 rare earth metal (excluding Ce) in a concentration of less than 15% by mole based on the total mole number of metal in the composite metal oxide. Also the present invention provides a cerium-zirconium composite metal oxide, characterized in that CeO₂ forms a core surrounded 25 by ZrO₂.